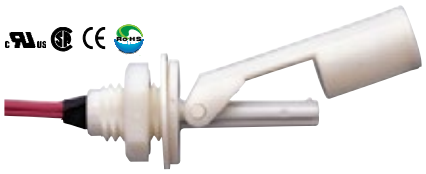
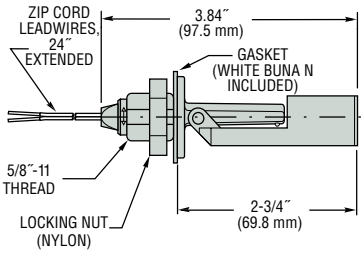
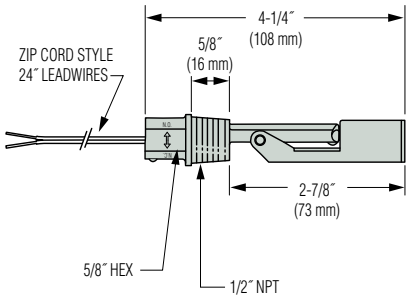
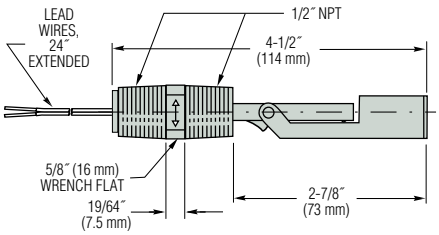
Small Size – Engineered Plastics

LS-7 Series–Compact Side Mounts are the Solution to Many Small Tanks

These low-cost units are ideal for high volume use in small tanks and vessels. Engineered plastics construction offers broad compatibility in water, oils and chemicals.

Type 3 Internal Mounting	Type 5 External Mounting	Type 7 External Mounting
		
Polypropylene, Nylon or Versaplast™.	Polypropylene, Nylon or Versaplast™.	Polypropylene or Nylon; conduit connection.
		

Common Specifications

Switch Rating*: SPST, 20VA

Lead Wire Gauge: No. 22 AWG

Mounting Attitude: Horizontal.

RoHS: In compliance with EU-directive 2011/65/EC requirements for chemicals and substances.

* See "Electrical Data" on Page X-5 for more information.

Approvals

Material	CE	UL Recognized File No. E45168	cUL Recognized	CSA Listed-File No. 30200	NSF Listed Mat. Std. 169
Nylon	X	X	X	X	
Polypropylene	X	X	X	X	X
Noryl®	X	X	X		X
Versaplast™	X	X	X		

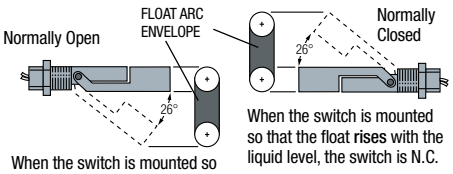
Media Compatibility

Media	LS-7 Compatible Types
Oil, Fuel, Hydrocarbons	Nylon
Broad Range of Chemicals and Water	Polypropylene
Limited Chemicals and Water	Noryl®
Oil, Antifreeze, High Temperatures, Corrosive Fluids, Various Chemicals	Versaplast™

Switch Operation

Depending on the mounting position, the float on these switches can rise or lower with the liquid level. By rotating the switch 180°, the switch operation can be Normally Open or Normally Closed (except Type 12).

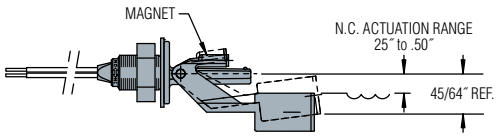
Types 3, 5, 7, 10 and 13



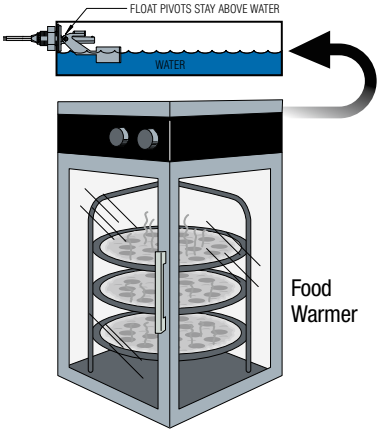
When the switch is mounted so that the float **lowers** with the liquid level, the switch is N.O.

When the switch is mounted so that the float **rises** with the liquid level, the switch is N.C.

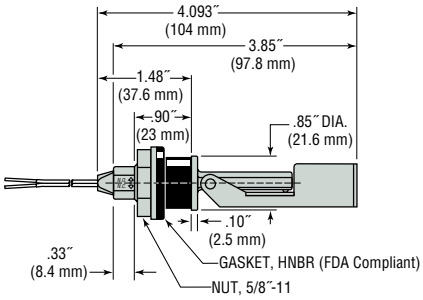
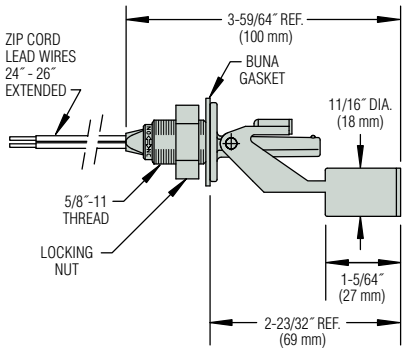
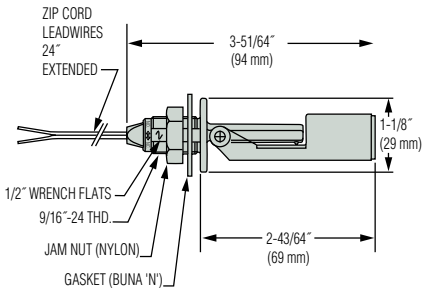
Type 12 – N.C. "Drop Float" Design



The LS-7 Type 12 is ideal for use on food warmers, hot water heaters, steam cookers, small boilers or wherever water evaporation occurs. The switch is used effectively for either high fluid level alarms or water make up systems. The units are made of Noryl®, which carries NSF approval for use in potable water, and are supplied with FDA-approved Buna gaskets.



- Nylon is ideal for oils and fuels.
- NSF Standard 169 polypropylene is ideal for potable water and broad chemicals.
- Versaplast™ is ideal for corrosive fluids, hot water, antifreeze, chemicals and oils.

Type 10 External Mounting	Type 12 Internal Mounting	Type 13 Internal Mounting
		
Externally mounts through and seals non-threaded holes using a HNBR compression gasket.	Side mount "Drop Down" design for calcifying hot water applications. NSF compliant Noryl®.	Polypropylene or Nylon.
		
Note: Recommended hole size = 7/8″ dia. x 1/32″ - 5/32″ thick panel.		

How To Order – Select Part Number based on specifications required.

Mounting Type	Materials* Stem and Mounting	Materials* Float	Materials* Lead Wire Jacket	Min. Liquid Sp. Gr.	Operating Temperature	Operating Pressure, Max.	Float Arc Envelope	Part Number
3	Nylon		TPE†	.65	-40°F to +250°F (-40°C to +121.1°C)	100 psi @ 70°F (6.8 bar @ 20°C)	2.20	165570 ⚡
	Polypropylene			.55	-40°F to +225°F (-40°C to +107.2°C)			164520 ⚡
	Versaplast™			.80	-40°F to +250°F (-40°C to +121.1°C)			182600
5	Polypropylene		TPE†	.55	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F (6.8 bar @ 20°C)	1.25	131100 ⚡
	Nylon			.65	-40°F to +250°F (-40°C to +121.1°C)			140620 ⚡
	Versaplast™		Teflon®	.80	-40°F to +300°F (-40°C to +148.9°C)			177100 ⚡
5 - BSP	Versaplast™		TPE†	.80	-40°F to +250°F (-40°C to +121.1°C)	100 psi @ 70°F (6.8 bar @ 20°C)	1.25	189422
7	Polypropylene		TPE†	.55	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F (6.8 bar @ 20°C)	1.50	160450 ⚡
	Nylon			.65	-40°F to +250°F (-40°C to +121.1°C)			160460 ⚡
10	Polypropylene		TPE†	.55	-40°F to +225°F (-40°C to +107.2°C)	50 psi @ 70°F (3.4 bar @ 20°C)	2.08	165800 ⚡
	Nylon			.65	-40°F to +250°F (-40°C to +121.1°C)			165900
12	Noryl®		TPE†	.80	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F (6.8 bar @ 20°C)	.70	191080 ⚡
13	Polypropylene		TPE†	.55	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F (6.8 bar @ 20°C)	2.20	197050

* Polysulfone and Ryton® R-4 are available upon request.
† Thermoplastic Elastomer Zip Cord, 22 AWG.
Note: NSF 169 Versions available. Contact factory.

⚡ – Stock Items.

See alloy versions on next page.

Small Size - Alloys

LS-7 Series
Compact Alloy and Alloy/Plastics Side Mounts

Built for durability, our LS-7 Series switches utilize stainless steel, or zinc bodies. Ideal for any small tank or vessel destined for a rugged environment. All-stainless steel material of construction of Types 9 and 11 is generally recognized as safe with FDA for food contact regulations.

Common Specifications

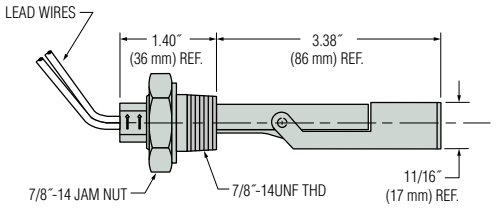
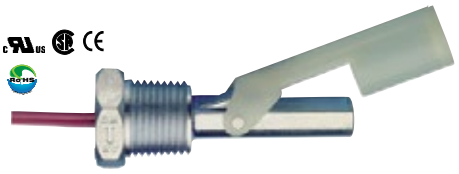
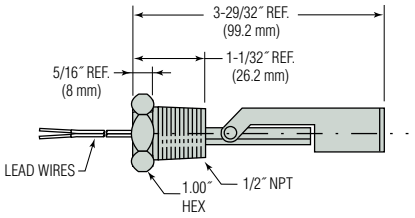
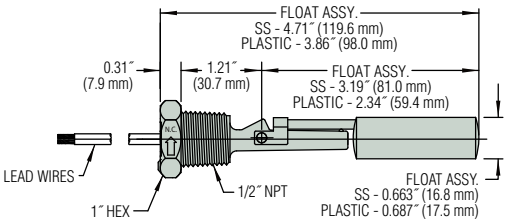
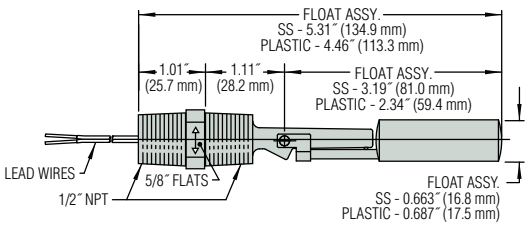
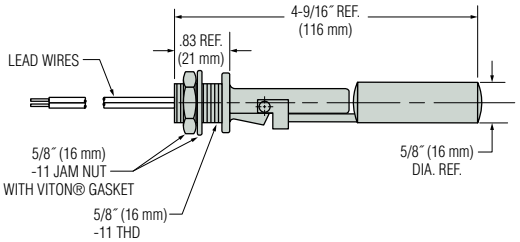
Switch Rating*: SPST, 20VA

Lead Wire: 22 AWG, 24″-27″ Extended

Mounting Attitude: Horizontal.

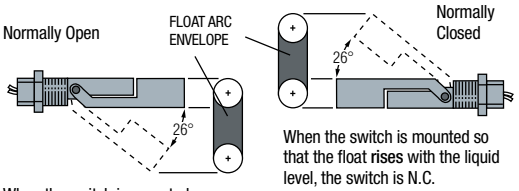
RoHS: In compliance with EU-directive 2011/65/EC requirements for chemicals and substances.

*See "Electrical Data" on Page X-5 for more information.

Type 6 External Mounting	 Zinc alloy body with polypropylene or nylon float. SAE Mounting.	
Type 8 External Mounting	 Zinc alloy body with nylon or polypropylene float.	
	 316 Stainless Steel body with 316 SS, nylon or polypropylene float.	
Type 9 External Mounting	 316 Stainless Steel body with 316 SS, nylon or polypropylene float.	
Type 11 Internal Mounting	 316 Stainless Steel body with 316 S.S. float.	

Switch Operation

Depending on the mounting position, the float on these switches can either rise or lower with the liquid level. By rotating the switch 180°, the switch operation can be Normally Open or Normally Closed.



When the switch is mounted so that the float **lowers** with the liquid level, the switch is N.O.

When the switch is mounted so that the float **rises** with the liquid level, the switch is N.C.

How To Order – Select Part Number based on specifications required.

Mounting Type	Materials			Min. Liquid Sp. Gr.	Operating Temperature	Operating Pressure, Max.	Float Arc Envelope	Part Number
	Stem and Mounting	Float	Lead Wire Jacket					
6	Zinc Alloy*	Nylon	TPE†	.65	-40°F to +250°F (-40°C to +121°C)	100 psi @ 70°F	1.36	**155660** ⚡
		Polypropylene		.75	-40°F to +225°F (-40°C to +107°C)	100 psi @ 70°F	1.36	**179870**
8	Zinc Alloy*	316 S.S.	TPE†	.80	-40°F to +250°F (-40°C to +121°C)	300 psi @ 70°F	1.43	**249315**
		Nylon		.65	-40°F to +250°F (-40°C to +121°C)	100 psi @ 70°F	1.40	**160950** ⚡
		Polypropylene		.55	-40°F to +225°F (-40°C to +107°C)	100 psi @ 70°F	1.40	**162795** ⚡
	316 Stainless Steel	316 S.S.	TPE†	.80	-40°F to +250°F (-40°C to +121°C)	300 psi @ 70°F	1.43	**249315**
		Nylon		.65	-40°F to +250°F (-40°C to +121°C)	100 psi @ 70°F	1.40	**247390**
		Polypropylene		.55	-40°F to +225°F (-40°C to +107°C)	100 psi @ 70°F	1.40	**247380**
9	316 Stainless Steel	316 S.S.	TPE†	.80	-40°F to +250°F (-40°C to +121°C)	300 psi @ 70°F	1.43	**164870** ⚡
		Nylon		.65	-40°F to +250°F (-40°C to +121°C)	100 psi @ 70°F	1.40	**164850** ⚡
		Polypropylene		.55	-40°F to +225°F (-40°C to +107°C)	100 psi @ 70°F	1.40	**164860** ⚡
11	316 Stainless Steel		Teflon®	.80	-40°F to +250°F (-40°C to +121°C)	300 psi @ 70°F	1.65	**179445**

†Thermoplastic Elastomer Zip Cord.

⚡ – Stock Items.

***Zinc Alloy Material Note:**
When mounted in certain cathodic metals, including stainless steel, and used in water-based liquids, galvanic corrosion may occur. Consult factory for information.